

Claims

1. A rear projection display screen comprising:

a first optical member which converts a diffusion light from a light source into a collimated light; and

a second optical member which converts the collimated light output from the first optical member to light having a proper output angle-luminosity distribution in the order from the light source side, wherein

at least a light-source side surface of the second optical member has a refractive index distribution.

2. A rear projection display screen according to claim 1, wherein the refractive index distribution is set to a gentle distribution such that the refractive index of a portion which is brought into contact with air assumes a lowest value and the refractive index of a portion remotest from the air assumes a highest value.

3. A rear projection display screen according to either one of claim 1 or 2, wherein the refractive index distribution is set by changing an average refractive index which is determined based on an abundance ratio between a plurality of convex portions formed on a surface of the second optical member and air which fills gaps defined between the convex portions in the direction perpendicular to the surface of the second optical member.

4. A rear projection display screen according to claim 3, wherein the convex portions are formed through a step in which a

liquid material containing at least one kind of curing material is applied to a surface of a base body and, thereafter, the curing material is cured, and a step in which uncured portions of the curing material are removed.

5. A rear projection display screen according to claim 4, wherein a solution which mixes a liquid crystal material, a polymerized monomer and an oligomer is adopted as a liquid material.